



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,681	01/07/2005	Ralf Neuhaus	2002P03767WOUS	5198
7590 Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830			EXAMINER PATEL, ASHOKKUMAR B	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 05/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,681	Applicant(s) NEUHAUS ET AL.	
	Examiner Ashok B. Patel	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>01/07/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-25 are subject to examination. Claims 1-7 are cancelled.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 8-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification of this application under examination in such a way as to reasonably convey to one skilled in the relevant art to use and/or make the invention.

Referring to claim 8,

The specification of this application under examination does not contain subject matter to implement limitation, "a retrieval mechanism", as cited in claim 8. Also, it is not apparent how "a retrieval mechanism" is configured.

Examiner has reviewed the specification of this application under examination and could not find support for this limitation as claimed.

There is insufficient antecedent basis for this limitation in the claim.

Referring to claims 9-15,

Claims 9-15 are rejected for the reasons set forth for claim 8 as above, because of their dependency on claim 8.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 8,

Claim 8 recites in preamble “A communication network having a communication component with client and server functionalities”. Claim goes further reciting “the client functionalities including a search function for ascertaining a current address of those communication components that allow the server functionalities to be used”, a retrieval mechanism that obtains information about the server functionalities of the communication component, the client functionalities of other communication components capable of retrieving the information obtained by the retrieval mechanism, wherein the server functionalities provide usable services in the communication network.

This “the server functionalities”, and “the client functionalities” are of the communication components whose current address is ascertained. Thence, there is insufficient antecedent basis for these limitations in the claim.

Art Unit: 2154

Also, how “ascertaining a current address” could occur when “a communication network having a communication component”? Is it not true that “a communication component” can have a unique and only one address, without any indication or inclusion of an old address?

Referring to claims 9-15,

Claims 9-15 are rejected for the reasons set forth for claim 8 as above, because of their dependency on claim 8.

Referring to claim 16,

How “ascertaining a current address” could occur when “a communication component” can have a unique and only one address, without any indication or inclusion of an old address?

Referring to claims 17-25,

Claims 17-25 are rejected for the reasons set forth for claim 8 as above, because of their dependency on claim 16.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 8-10, 14-18, 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodman et al. (hereinafter Goodman) (US 7, 130, 921 B2).

Referring to claim 8,

Goodman teaches a communication network having a communication component with client and server functionalities (col. 4, line 18-24 "the preferred embodiment is directed towards peer-to-peer (P2P) resource sharing within a corporate intranet environment. The preferred embodiment is a hybrid system for P2P resource sharing. It consists of both a server and a client component. It supports the features of the three aforementioned P2P architectures, as well as some additional characteristics.", col. 46-49, "Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.", Fig. 4, col. 7, line 29-31 and line 61-col. 8, line 1, "Resources are preferably searched by searching metadata 424 which includes access controls and resource attributes.", "The client of FIG. 4 may also initiate SEARCH and GET requests. When a SEARCH request is initiated, the terms of the search are received typically from an operator of the client. The SEARCH and GET request processor 430 packages the terms of the search along with the credentials of the client 432 including a client ID and password as well as its IP address. The search request is then communicated to clients having an IP address included in its seed list 434, seed list 434 having IP addresses received from server 102."), the client functionalities including a search function for ascertaining a current address of those communication components that allow the

server functionalities to be used (col. 4, line 32-41, "Reliable IP Repository--Each client first "announces itself" to the server, and requests a list of IP addresses of connected clients. The server sends a seed list of the connected clients. (The term seed list is used because each client needs to know only a limited number of other connected clients). The server maintains a current list of connected clients by maintaining a list of clients, and pinging each client periodically. ", col. 4, line 50-60, "Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client sends a handshake to each of the clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.", col. 5, line 39-46, "If an acknowledgement signal is not received, then the client address is removed from the list. Preferably the server periodically send a PING signal to connected clients and if an acknowledgement PONG signal is not received within a predetermined time the server determines the client is disconnected and removes the address of the client from list 206."), comprising:

a retrieval mechanism (col. 6, line 57-60, "Dispatcher and network interface 402 facilitates communication with the server, authentication and authorization process and other clients via the intranet backbone 100.") that obtains information about the server functionalities of the communication component (col. 8, line 31-38," Thereafter, the client sends a connect signal including the address of the client to the server at step 502. The server receives the connect signal at step 504 and adds the client address to

Art Unit: 2154

the connected client address list, step 506. Step 508 generates a seed list for the client using any method including the aforementioned seed list generation methods. The seed list is sent from the server at step 510 and received by the client at step 512.”), the client functionalities of other communication components capable of retrieving the information obtained by the retrieval mechanism (col. 6, line 60-col. 7, line 3, “The dispatcher responds to at least three signals received on the intranet backbone. The three signals are PING, SEARCH and GET. The client is also able to initiate PING, SEARCH and GET commands as well as communicate with the server 102 and authentication and authorization process 104. In responding to commands, the dispatcher 402 routes PING commands to ping/pong process 404 which responds to reception of a PING command with an acknowledging PONG command. SEARCH and GET commands are routed by dispatcher 402 to search and get processors 405 and 406.”, col. 7, line 44-50, “A GET request is typically initiated by a client having initiated a SEARCH request and further having received a positive search result from the client receiving the GET request. The GET request may be both authorized and/or authenticated prior to execution by get process 406. Thereafter, the particular resource identified by the GET request is communicated to the requesting client.”),

wherein the server functionalities provide usable services in the communication network (col. 7, line 27-43, “If the SEARCH request is authenticated, then memory 320 of the client is searched for resource 422 matching the SEARCH request. Resources are preferably searched by searching metadata 424 which includes access controls and resource attributes. Search process 404 determines which resources may be searched

by comparing the authorized access controls with the access controls associated with each resource. If there is a match, then the resource may be searched. Searching is preferably performed by searching attributes of the resource, the attributes including file type, file size, date or author. The attributes may also include comments or abstracts, for example manually generated by the author, providing additional information about the resource, thereby facilitating keyword searches. Alternatively, a more exhaustive search of the resource itself may be conducted. If a match is found, then a positive signal is propagated back to the client initiating the search.”)

Referring to claim 9,

Goodman teaches the communication network as claimed in Claim 8, wherein the communication network provides for a self-administration on the basis of the information ascertained by the search functions (col. 3, line 28-36, “Another embodiment of the present invention provides a client in a peer-to-peer network having a server and a multiplicity of clients having searchable resources, each of the multiplicity of clients having a unique client address. The client comprises a seed list receiver for receiving and storing a seed list of client addresses from the server, and a peer-to-peer network search dispatcher for forwarding a resource search request to client addresses of the seed list.”, col. 4, line 50-60, col. 4, line 50-60, “Reduced Network Activity--Unlike a pure P2P network, clients need not ping the other clients continuously. Instead, a client maintains awareness of other connected clients by downloading the list of IP addresses from the server periodically. Each client sends a handshake to each of the

Art Unit: 2154

clients in the list received. If an acknowledgement is received from another client, that client is added to the original client's list.”.

Referring to claim 10,

Goodman teaches the communication network as claimed in Claim 8, wherein a plurality of search functions are contained in the communication network and in a plurality of communication components (col. 3, line 3-11, “One preferred embodiment of the present invention provides a method in a client in a peer-to-peer network having a server and a multiplicity of clients having searchable resources, each of the multiplicity of clients having a unique client address the method comprising the steps of receiving a seed list of client addresses from the server; and forwarding a resource search request to client addresses of the seed list.”)

Referring to claim 14,

Goodman teaches the communication network as claimed in Claim 8, wherein the client functionality is designed to retrieve an authorization before using a server functionality (col. 4, line 42-45, “Authentication and authorization--Metadata associated with each resource includes file descriptions as well as security and access control information. The security checks can be local account based or enterprise level security based.”)

Referring to claim 15,

Goodman teaches the communication network as claimed in Claim 14, wherein at least one server functionality is provided for managing the authorization (Fig. 1, element 104, Fig. 4, element 408, 410, 412, col. 4, line 42-45, “Authentication and

authorization--Metadata associated with each resource includes file descriptions as well as security and access control information. The security checks can be local account based or enterprise level security based.").

Referring to claim 16,

Claim 16 is a claim to a method that is implemented in a communication network of claim 8. Therefore claim 16 is rejected for the reasons set forth for claim 8.

Referring to claim 17,

Claim 17 is a claim to a method that is implemented in a communication network of claim 9. Therefore claim 17 is rejected for the reasons set forth for claim 9.

Referring to claim 18,

Claim 18 is a claim to a method that is implemented in a communication network of claim 10. Therefore claim 18 is rejected for the reasons set forth for claim 10.

Referring to claim 22,

Claim 22 is a claim to a method that is implemented in a communication network of claim 14. Therefore claim 22 is rejected for the reasons set forth for claim 14.

Referring to claim 23,

Claim 23 is a claim to a method that is implemented in a communication network of claim 15. Therefore claim 23 is rejected for the reasons set forth for claim 15.

Referring to claim 24,

Goodman teaches the method as claimed in Claim 16, wherein the current address of all of the communication components are ascertained (col. 4, line 32-41, "Reliable IP Repository--Each client first "announces itself" to the server, and requests a

Art Unit: 2154

list of IP addresses of connected clients. The server sends a seed list of the connected clients. (The term seed list is used because each client needs to know only a limited number of other connected clients). The server maintains a current list of connected clients by maintaining a list of clients, and pinging each client periodically.”)

Referring to claim 25,

Goodman teaches the method as claimed in Claim 16, wherein the server functionality of all of the communication components are retrieved (col. 4, line 46-49, “Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.”)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 11, 12, 19 and 20 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Goodman et al. (hereinafter Goodman) (US 7, 130, 921 B2) in view of Dutta et al. (hereinafter Dutta) (US 2003/0050966 A1)

Referring to claim 11,

Goodman teaches the communication network as claimed in Claim 8, wherein a server functionality is selected for use when a plurality of server functionalities are

Art Unit: 2154

present. (col. 4, line 32-41, "Reliable IP Repository--Each client first "announces itself" to the server, and requests a list of IP addresses of connected clients. The server sends a seed list of the connected clients. (The term seed list is used because each client needs to know only a limited number of other connected clients). The server maintains a current list of connected clients by maintaining a list of clients, and pinging each client periodically.", col. 4, line 46-49, "Enhanced client database--Each client maintains a database of resources that it shares. The database will preferably not only contain names and characteristics of the files, but also user-defined metadata describing the files.")

Goodman fails to teach "by using a state information".

Dutta teaches in Abstract, "The response provided by the first peer node, i.e. either a copy of the specified file or the alternate node list, can be determined based on an operational condition of the first peer node, e.g., whether or not the first peer node is experiencing an overload condition."(by using a state information).

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Goodman and Dutta in front of him at the time of invention was made, to incorporate teachings of Dutta into the communication network of Goodman such that the state of the communication component is known before selecting the server functionality in an environment of multiple server functionalities like that of Goodman.

It would have been obvious for the reasons stated by Dutta at para. [0010] and [0011], "However, prior to requesting the download of a file from a particular node, a user does not have any information on the current load that is being experienced by the

Art Unit: 2154

particular node. Although the user may know the connection speed of the node, which may lead the user to assume that the download time from the node will be inversely proportional to the connection speed of the node, the node may be experiencing a heavy load with many simultaneous connections. Hence, after requesting to download a file from the node, the user may discover that the download of the file proceeds more slowly than desired, presumably because the node is experiencing a heavier load than the user may deem appropriate. [0011] Therefore, it would be advantageous to provide a method and system for improving response characteristics within a peer-to-peer data sharing network. It would be particularly advantageous to allow a node to indicate an alternate manner for fulfilling a download request if the node determines that its response characteristics would be inadequate if it attempted to fulfill a new download request."

Referring to claim 12,

Keeping in mind the teachings of Goodman stated in claims 8 and 11 above, Goodman fails to teach the communication network as claimed in Claim 11, wherein the state information comprises a current utilization level of the server functionalities that are present a plurality of times.

Dutta teaches in Abstract, "The response provided by the first peer node, i.e. either a copy of the specified file or the alternate node list, can be determined based on an operational condition of the first peer node, e.g., whether or not the first peer node is experiencing an overload condition."(a current utilization level of the server functionalities that are present a plurality of times.).

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Goodman and Dutta in front of him at the time of invention was made, to incorporate teachings of Dutta into the communication network of Goodman such that a current utilization level of the server functionalities that are present a plurality of times of the communication component is known before selecting the server functionality in an environment of multiple server functionalities like that of Goodman.

It would have been obvious for the reasons stated by Dutta at para. [0010] and [0011], "However, prior to requesting the download of a file from a particular node, a user does not have any information on the current load that is being experienced by the particular node. Although the user may know the connection speed of the node, which may lead the user to assume that the download time from the node will be inversely proportional to the connection speed of the node, the node may be experiencing a heavy load with many simultaneous connections. Hence, after requesting to download a file from the node, the user may discover that the download of the file proceeds more slowly than desired, presumably because the node is experiencing a heavier load than the user may deem appropriate. [0011] Therefore, it would be advantageous to provide a method and system for improving response characteristics within a peer-to-peer data sharing network. It would be particularly advantageous to allow a node to indicate an alternate manner for fulfilling a download request if the node determines that its response characteristics would be inadequate if it attempted to fulfill a new download request."

Referring to claim 19,

Claim 19 is a claim to a method that is implemented in a communication network of claim 11. Therefore claim 19 is rejected for the reasons set forth for claim 11.

Referring to claim 20,

Claim 20 is a claim to a method that is implemented in a communication network of claim 12. Therefore claim 20 is rejected for the reasons set forth for claim 12.

10. Claims 13 and 21 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Goodman et al. (hereinafter Goodman) (US 7, 130, 921 B2) in view of Bowman (US 2003/0208621 A1)

Referring to claim 13,

Keeping in mind the teachings of Goodman stated in claims 8 and 11 above, Goodman fails to teach the communication network as claimed in Claim 11, wherein the state information comprises the use cost of the server functionalities that are present a plurality of times.

Bowman teaches in Abstract, "The invention disclosed is a path optimizer for Peer to Peer (P2P) networks. Large amounts of P2P file exchanges increase the costs to maintain a network. Network service providers typically pay for the amount of data they exchange with other network service providers. The present invention examines P2P messages between and within networks and provides a cost efficient path to handle each P2P message."

Therefore it would have been an obvious to one of an ordinary skill in art, having the teachings of Goodman and Bowman in front of him at the time of invention was

Art Unit: 2154

made, to incorporate teachings of Bowman into the communication network of Goodman such that the use cost of the server functionalities are known before selecting the server functionality in an environment of multiple server functionalities like that of Goodman.

It would have been obvious for the reasons stated by Bowman at para. [0003] and [0004], "0003] P2P has led to increased financial pressure for network service providers. A network service provider is an entity that maintains a group of computers or nodes that form a network. Examples of networks include but are not limited to: a network controlled by an Internet Service Provider (ISP), a corporate network or a university network. [0004] A network service provider typically must pay a fee for the traffic to and from their network."

Referring to claim 21,

Claim 21 is a claim to a method that is implemented in a communication network of claim 13. Therefore claim 21 is rejected for the reasons set forth for claim 13

Conclusion


Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the

claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 6:30 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan A. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ashok B. Patel,
Examiner
AU 2154